Mobile Integrated Flat Panel C-arm Machine

Technical Specification

Package: 2500*1200*1480mm, total 4.5m³, Gross weight: 650kg, Net Weight: 500kg

I. Application:

Emergency Department, General Surgery, Spine Surgery, Orthopedics, Urology, Gynecology,Trauma, Pain Management, Plastic Surgery, Operating Room etc.

II. Configuration:

1	Integrated C-arm frame	1 set
2	High frequency and high voltage X-ray generator and high frequency inverter power supply	1 set
3	Virtual collimator & Motorized Beam collimator	1 set
4	Plugable dense grain grid	1 set
5	9*9 inch Dynamic flat panel detector	1 set
6	All-in-one computer 27-inch LCD monitor	1 set
7	Digital acquisition workstation software	1 set
8	DAP	1 set
9	Laser -cross Locator (two-way positioning)	1 set
10	11.6inch human graphic LCD touch screen	1 set
11	X-ray lock	1 set
12	standby built in battery for fast transitions in different OR	1 set
13	Wireless foot exposure switch	1 set
14	Safety Emergency stop button	1 set

III.Advantages:

1. Integrated design, Small in size, take only one square meter
2. Non mains power standby design for fast transitions in different OR
3. Two way laser positioning
4. Low Dose mode & frequency conversion
5. Plugable grid
6. Dynamic FPD,22% larger view than I.I, Higher pixel range, wider dynamic range

IV,Technical specification:

Category	Items	Content
Generator	Power supply High frequency inverter	Power output: 5.0kW Main inverter frequency: 110 kHz

	Continuous fluoroscopy	tube voltage 40 kv~120kv tube current : 0.3mA~4mA
	Pulse fluoroscopy	tube voltage 40 kv~120kv tube current : 0.3mA~30mA
	Photography tube voltage, mA	40KV~120KV, 25mA~100mA, 1.0mAs~280mAs
Generator	Digital point chip function	Voltage range of digital point chip tube: 40-112KV Current range of digital point chip tube: 0.3-15mA
	Automatic brightness tracking function (IBS)	Available
	X-ray lock design	Available
X-ray tube	X-ray tube special for high frequency	Dual focus:0.6/2.0mm Anode target :9° thermal capacity: 650kJ (867kHu)
Imaging system	Detector	Type: amorphous silicon Sensor:CsI Dynamic flat panel detector Effective Area: 9*9inch (21*21cm) Matrix: 1024*1024 Dynamic range: 16bit Pixel size: 205um Spatial resolution:2.5lp/mm DQE:78% Imaging speed: 1 second to produce images
	Monitor	All-in-one computer 27-inch LCD monitor
	Workstation software	Information management: registration and preservation, medical record query, modification, remote query registration, report form, save, preview; Image post-processing: start to capture, prepare for recording, reset, horizontal mirroring, vertical mirroring, window adjustment, magnifying glass, negative; Image, edge enhancement, recursive noise

		reduction; Image storage and transmission: print film, check SCP service, and send files; Image measurement and identification: measurement, advanced; support DICOM3.0; The gray level of the image clarity index of the whole machine: Level 17.
Structure and performance	Monitor arm	Display arm: three-axis articulated arm The rotation angle of the horizontal; movement of the display: 1-axis ±90 degrees, 2-axis ±135 degrees, 3-axis ±90 degrees; Display the axial rotation angle (up and down tilt): -15°-45°.
	C-arm movement	Motor-driven vertical travel: 380mm-420mm; Horizontal travel: 190mm-200mm; Angulation : ±180°; C-arm swiveling: ±12°-±18°; Distance from focus to screen: 1000 mm; C-arm open distance: 800mm C-arm arc depth: 660mm; Slipping on orbit : 130°-140°

V.Features:

1. Independent research and development of the integrated C-arm main frame, which is light and dexterous and suitable for various surgical postures;
2. Using 9-inch dynamic flat panel detector, output gray scale 16bit, high DQE, low noise, dynamic range promotion, imaging.The performance is superior, the image is clear, and it can meet various clinical examination needs;
3. The image processing software adopts a GPU-based fast dynamic image processing and display platform (RCDPS), multi-resolution,analysis of image enhancement processing technology, different image processing for different parts, to meet the diverse needs of customers;
4. Independent research and development of high-frequency and high-voltage generator to realize high-frequency pulse fluoroscopy and reduce dose;
5. Gigabit network is used to connect with the dynamic flat panel detector; Dicom3.0 international standard interface is provided, which is convenient to connect to the PACS

system for transmission and printing;
6. The humanized image control interface, intelligently control the dose, reduce the cumbersome operation, and is suitable for surgical needs; according to clinical presets;
The fluoroscopy parameters of human body features such as parts, multi-positions, multi-body types, such as adults and children, are easy to operate;
7. With multiple automatic protection and fault code prompt functions, maintenance is more convenient;
8. With balanced design, the C-arm frame can hover at any angle when it is unlocked to ensure safe and stable operation of the equipment;
9. The large-size touch-control operation screen is adopted, with high sensitivity and flexible rotation, which is convenient for clinicians to touch at all angles of the machine to control operation;
10. 32-inch ultra-wide screen display, large-size 4K liquid crystal display, the image display is clear and delicate; the display can be rotated at a large angle, meet the needs of clinical multi-angle observation images;
11. One-key switch machine design, which can quickly start the machine, and in case of emergency (such as emergency rescue), you can quickly start the machine, start the work in time by moving the machine, which greatly improves work efficiency;
12. Non-network power standby design, this equipment can realize the non-network power standby transition between multiple operating rooms, improving the efficiency of the equipment work efficiency;
13. Two-way laser positioning, laser positioning systems are installed at both ends of the tube and flat-panel detector to meet different positions, the positioning requirements under the five rays can reduce the radiation dose of doctors and patients while improving the efficiency of clinical work;
14. High-frequency inverter technology, the ray waveform presents a rectangular wave with low scattering lines, which prevents the generation of soft rays from the source to ensure precise radiation dose control effectively cares for the health of doctors and patients;
15. With low-dose mode, the machine is equipped with a variety of clinical low-dose exposure parameters to strictly control unnecessary radiation,shot dose;
16. Beam beam preview, with beam beam preview function, can realize the adjustment of the size of the exposure range in the wireless state; significantly reduce the radiation caused by repeated clinical exposure. And automatically adjust the size and position of the image interest area, using automatic mode, the formula is more accurate;
17. The grid is pluggable in design and conforms to domestic industry standards. It is used in pediatrics and other dose-sensitive clinical applications, easy to use, while ensuring clear images, it can effectively protect against radiation hazards;
18. Intelligent frequency conversion technology automatically adjusts the image frame

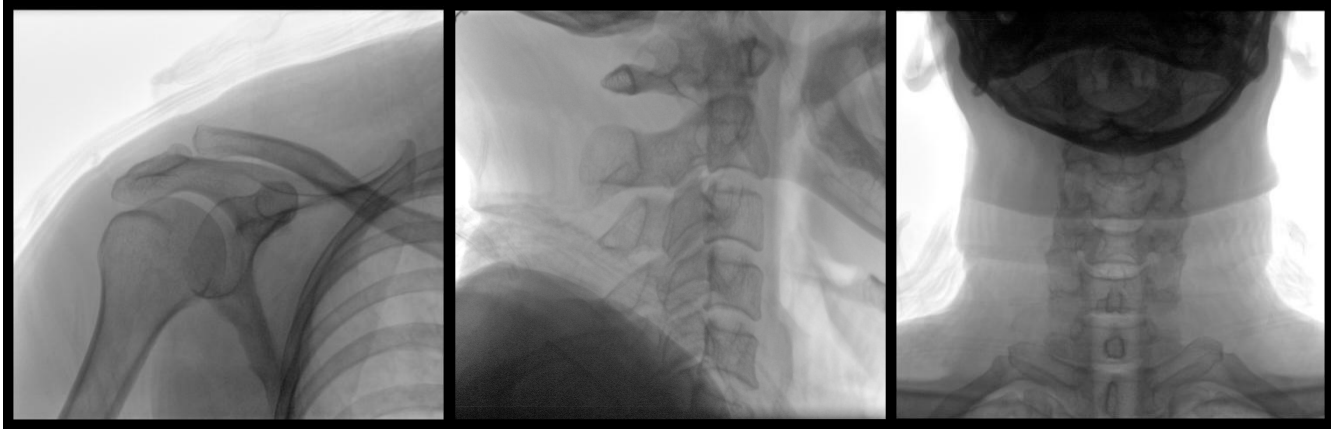
frequency according to the body part and radiation dose, ensuring image quality;

19. Intelligent real-time image processing technology, which automatically analyzes images and performs enhancement processing, reducing image processing in clinical applications timely cumbersome operation, quickly provide high-quality images to facilitate the completion of clinical work;

20. Fast and stable drawing design in 1 second can save clinicians' waiting time during clinical application and improve work efficiency;

21. With the DAP dose display, you can directly observe the dose display during the use of the machine to protect the health of doctors and patients.

Image Reference



China Care Medical Equipment Co.,Ltd
Adress:Room B101, Zhongbang Business Building, PuXing Road No. 87, Tianhe, Guangzhou,
Chinaweb:www.chinacaremedical.com